



**KCP&L Greater Missouri Operations Co
Utility-Owned Electric Generation and Emissions in 2009**

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated in 2009 (MWh)	Percent of Total	
Non-renewable sources						
Coal-fired power	38,157,116	93.49%		3,259,434	95.13%	
Natural gas-fired power	2,406,174	5.90%		146,775	4.28%	
Oil-fired power	78,186	0.19%		6,063	0.18%	
Nuclear power						
Other non-renewable power	173,824	0.43%		14,037	0.41%	
Non-renewable total	40,815,300	100.00%	99.50%	3,426,308	100.00%	99.45%
Renewable sources						
Hydroelectric Power						
Wind						
Waste and biomass	203,674	100.00%		18,790	100.00%	
Solar						
Geothermal						
Landfill Gas						
Renewable total	203,674	100.00%	0.50%	18,790	100.00%	0.55%
Grand total all sources	41,018,974		100.00%	3,445,098		100.00%

Fuel Type	Physical Units	Number of Units
Bituminous Coal	Short Tons	335,767
Sub-Bituminous Coal	Short Tons	1,718,026
Natural Gas	Mcf	2,406,174
Distillate Fuel Oil	Barrels	1,311
Jet Fuel	Barrels	0
Propane	Mcf	28,258
Other Fuel Types		0
Tire-Derived Fuel	Short Tons	1,727,462
Agricultural Waste/Biomass	Short Tons	13,056



Net Generation by Fuel Type, 2009 for KCP&L Greater Missouri Operations Co





**Emissions from Electricity Generated in 2009: KCP&L Greater Missouri
Operations Co**

Plant	Carbon Dioxide (CO ₂) (Tons)	Carbon Monoxide (CO) (Tons)	Ammonia (NH ₃) (Tons)	Nitrogen Oxides (NO _x) (Tons)	Sulfur Dioxides (SO ₂) (Tons)
KCP&L Greater Missouri Operations Co	3,569,793.13	599.61	2.05	5,598.22	14,188.65
Greenwood	25,625.38	17.95	NV	59.30	0.40
Kansas City International	0.00	NV	NV	NV	NV
Lake Road	559,084.52	139.36	1.58	2,577.19	2,400.85
Nevada	26.06	NV	NV	0.82	0.01
Ralph Green	297.38	0.08	NV	0.80	0.00
Sibley	2,946,396.34	415.75	0.47	2,942.30	11,787.20
South Harper	38,363.44	26.47	NV	17.80	0.19

Plant	Volatile Organic Compounds (VOC) (Tons)	Course Particulate Matter (PM10 Total) (Tons)	Fine Particulate Matter (PM2.5 Total) (Tons)	Mercury (Hg) (LBS)
KCP&L Greater Missouri Operations Co	114.52	48.57	30.38	45.95
Greenwood	0.46	1.46	1.46	NV
Kansas City International	NV	NV	NV	NV
Lake Road	21.99	40.89	23.03	NV
Nevada	NV	0.01	0.01	NV
Ralph Green	0.01	0.02	0.02	NV
Sibley	91.38	4.90	4.58	45.95

'NV' = Emissions value not available.

Note: The data provided includes only generation and emissions from power plants owned by the utility. It does not include generation or emissions from power purchased by the utility and distributed to its customers.



**Pollution controls installed on plants operated by KCP&L Greater Missouri
Operations Co**

SO2 Controls			
Plant	Control Equipment	Sorbent Type	Operational Efficiency
Greenwood	No SO2 Controls Installed		
Kansas City International	No SO2 Controls Installed		
Lake Road	No SO2 Controls Installed		
Nevada	No SO2 Controls Installed		
Ralph Green	No SO2 Controls Installed		
Sibley	No SO2 Controls Installed		
South Harper	No SO2 Controls Installed		

NOX Controls				
Plant	Device Type	Description	Capture Efficiency	Control Efficiency
Greenwood	No NOX Controls Installed			
Kansas City International	No NOX Controls Installed			
Lake Road	No NOX Controls Installed			
Nevada	No NOX Controls Installed			
Ralph Green	WATER INJECTION	STEAM OR WATER INJECTION	100.00%	55.00%
Sibley	SCR (SELECTIVE CATALYTIC REDUCTION)	SCR	100.00%	50.00%
South Harper	No NOX Controls Installed			



**Missouri Power plants owned and operated by KCP&L Greater Missouri
Operations Co in 2009**

Plant	County	Primary Fuel	Capacity (MW)	Net Generation (MWh)
Greenwood	Jackson	Natural Gas	244	28,782
Kansas City International	Platte	Natural Gas	36	-190
Lake Road	Buchanan	Sub-Bituminous Coal	273	468,483
Nevada	Vernon	Distillate Fuel Oil	22	-85
Ralph Green	Cass	Natural Gas	74	-177
Sibley	Jackson	Sub-Bituminous Coal	524	2,899,049
South Harper	Cass	Natural Gas	351	49,236

Data Sources

- Emissions Data: Missouri Department of Natural Resources, Air Pollution Control Program, Missouri Emissions Inventory System (MOEIS)
<http://www.dnr.mo.gov/env/apcp/moeis/emissionsreporting.htm>
- CO2 Emissions calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data
- Fuel Consumption and Generation Data: United States Energy Information Administration, Form 923, United States Department of Energy
http://www.eia.gov/cneaf/electricity/page/eia906_920.html